

In The United States Patent And Trademark Office

Appl. No.: 09/745,289 Confirmation No.: 6983
Applicant(s): Richard D. Romero et al.
Filed: December 20, 2000
Art Unit: 2157
Examiner: Burgess, Barbara N.
Title: SEGMENTING ELECTRONIC DOCUMENTS FOR USE
ON A DEVICE OF LIMITED CAPABILITY

Docket No.: 042933/274313
Customer No.: 00826

Filed Via USPTO EFS-Web

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**APPEAL BRIEF TRANSMITTAL
(PATENT APPLICATION – 37 C.F.R. § 41.37)**

1. Transmitted herewith is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on October 30, 2007.
2. ☐ Applicant claims small entity status.
3. Pursuant to 37 C.F.R. § 41.20(b)(2), the fee for filing the Appeal Brief is:
☐ small entity \$255.00
☒ other than small entity \$510.00
Appeal Brief fee due \$510.00
☐ Fee is Enclosed
☒ Please charge the fee to Deposit Account 16-0605.
☒ Any additional fee or refund may be charged to Deposit Account 16-0605.

Respectfully submitted,



Nathaniel T. Quirk
Registration No. 60,676

CUSTOMER NO. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.: 09/745,289 Confirmation No.: 6983
Applicant(s): Richard D. Romero et al.
Filed: December 20, 2000
Art Unit: 2157
Examiner: Burgess, Barbara N.
Title: SEGMENTING ELECTRONIC DOCUMENTS FOR USE
ON A DEVICE OF LIMITED CAPABILITY

Docket No.: 042933/274313
Customer No.: 00826

Filed Via USPTO EFS-Web

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF UNDER 37 CFR § 41.37

This Appeal Brief is filed pursuant to the Notice of Appeal filed October 30, 2007.

1. ***Real Party in Interest.***

The real party in interest in this appeal is Eizel Technologies, Inc, the assignee of the above-referenced patent application, which is now owned by Nokia Corporation.

2. ***Related Appeals and Interferences.***

There are no related appeals and/or interferences involving this application or its subject matter.

3. ***Status of Claims.***

The present application currently includes claims 1, 2, 5-14, 16-18 and 20-53, which all stand rejected. Appellants appeal the rejections of claims 1, 2, 5-14, 16-18 and 20-53.

4. ***Status of Amendments.***

There are no unentered amendments in this application.

5. ***Summary of Claimed Subject Matter.***

The claimed invention provides various methods, apparatuses and a machine readable document and program for segmenting electronic documents. In this regard, as recited in independent claim 1, a method according to one embodiment includes receiving a machine readable file containing a document that is to be served to a client for display on a client device (page 2, lines 11-13). The organization of the document in the file is expressed as a hierarchy of information (page 2, lines 14-15). The method further includes deriving subdocuments from the hierarchy of information (page 2, lines 15-16) by traversing the hierarchy and assembling the subdocuments from segments (page 2, lines 23-24). At least some of the subdocuments are each assembled from more than one of the segments (page 2, line 24 to page 3, line 1). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 2, lines 16-18). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 2, lines 18-20). The assembly of the subdocuments conforms to an algorithm that tends to balance the respective sizes of the subdocuments (page 3, lines 1-3).

Independent claim 13 is directed to a method that includes receiving, from an origin server (page 3, lines 7-8), a machine readable file containing a document that is to be served to a client for display on a client device (page 2, lines 11-13). The file is expressed in a language that does not organize segments of the document in a hierarchy (page 3, lines 8-9). The method further includes converting the file to a language that organizes segments of the document in a hierarchy (page 3, lines 9-11) and traversing the hierarchy and assembling subdocuments from the segments (page 2, lines 23-24). At least some of the subdocuments are assembled from more than one of the segments (page 2, line 24 to page 3, line 1). The assembling conforms to an algorithm that tends to balance the respective sizes of the subdocuments (page 3, lines 1-3). The algorithm also favors assembling the subdocuments from segments that have common parents in the hierarchy (page 3, lines 2-4). The algorithm also favors assembling the subdocuments from segments for which replications of nodes in the hierarchy are not required (page 3, lines 4-7). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 2, lines 16-18). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 2,

lines 18-20). The method further includes serving the subdocuments to the client individually as requested by the client (page 3, lines 12-13) based on the contained information that enables it to be linked to another of the subdocuments (page 3, lines 14-17).

Independent claim 14 recites a machine-readable document held on a storage medium for serving to a client (page 3, line 24 to page 4, line 1). The document is organized as a set of subdocuments (page 4, line 1). At least one of the subdocuments contains information that enables the subdocument to be linked to another of the subdocuments (page 4, lines 2-3). The information enables the subdocument to be linked comprising a URL (page 4, lines 9-10). The subdocuments include an assembly of segments of the document that are part of a hierarchical expression of the document in which the subdocuments are of approximately the same size (page 4, lines 3-7).

Independent claim 17 recites a method including receiving from a client a request for a document to be displayed on a client device (page 4, lines 12-13) and serving separately to the client a subdocument that represents less than all of the requested document (page 4, lines 14-15). The subdocument contains information that links it to at least one other subdocument (page 4, lines 15-16). The method further includes receiving from the client an invocation of the link to the other subdocument (page 4, lines 17-18) and serving separately to the client device the other subdocument (page 4, lines 18-19). The subdocuments being of essentially the same length (page 5, lines 8-9).

Independent claim 21 recites a method including receiving from a server at a client device, a subdocument of a larger document for display on the client device (page 5, lines 1-3), and displaying the subdocument on the client device (page 5, lines 3-4). The method further includes receiving at the client device a request of a user to have displayed another subdocument of the larger document (page 5, lines 4-6), and receiving separately from the server at the client device, the other subdocument (page 5, lines 6-7). The method further includes displaying the other subdocument on the client device (page 5, lines 7-8) in which the subdocuments are of substantially the same length (page 5, lines 8-9).

Independent claim 26 recites a method including displaying a subdocument of a document on a client device (page 5, lines 14-16) and displaying an icon with the subdocument (page 5, line 16). In response to invocation of the icon, another subdocument of the document is

fetched from a server (page 5, lines 17-19). The other subdocument is displayed on the client device (page 5, lines 18-19). The subdocuments are less than the entire document (page 5, lines 19-20) and are of approximately the same size (page 5, lines 20-21).

Independent claim 37 recites an apparatus including a network server configured to receive a machine readable file containing a document that is to be served to a client for display on a client device (page 6, lines 14-17), and to derive subdocuments from the file (page 6, lines 17-18). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 6, lines 18-20). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 6, lines 18-20). The subdocuments are of essentially the same length (page 5, lines 8-9).

Independent claim 38 recites an apparatus including means for receiving a machine readable file containing a document that is to be served to a client for display on a client device (page 6, line 23 to page 7, line 1) and means for deriving subdocuments from the file (page 7, line 1). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 7, lines 2-4). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 7, lines 4-6). The subdocuments are of essentially the same length (page 5, lines 8-9).

Independent claim 39 recites a machine-readable program stored on a machine-readable medium and capable of configuring a machine to receive a machine readable file containing a document that is to be served to a client for display on a client device (page 7, lines 8-11), and to derive subdocuments from the file (page 7, line 11). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 7, lines 12-14). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 7, lines 14-16). The subdocuments are of essentially the same length (page 5, lines 8-9).

Independent claim 50 recites an apparatus including a client device configured to receive and display a subdocument of a larger document for display (page 5, lines 1-3). The client device is also configured to receive a request of a user to have displayed another subdocument of the larger document (page 5, lines 4-6), and thereafter separately receive and

display at least one other subdocument (page 5, lines 6-7). The subdocuments are of substantially the same length (page 5, lines 8-9).

6. ***Grounds of Rejection to be Reviewed on Appeal.***

The following grounds of rejection are appealed:

(A) Claims 1, 2, 5-14, 16-18, 20-25 and 30-53 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ozzie et al. (U.S. Patent No. 6,941,510, hereinafter "Ozzie") in view of Doerre et al. (U.S. Patent No. 6,446,061, hereinafter "Doerre").

(B) Claims 26-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ozzie in view of Doerre and further in view of Shklar et al. (U.S. Patent No. 6,253,239, hereinafter "Shklar").

7. ***Argument.***

The claimed invention, as recited by independent claims 1, 13, 14, 17, 21, 26, 37-39 and 50, provide for the assembly of subdocuments using an algorithm that tends to balance the respective sizes of the subdocuments or make the subdocuments of substantially the same size or length. Appellants respectfully submit that the independent claims are patentable over the cited references either alone or in combination. In this regard, Appellant submits that, in particular, Ozzie, Doerre and Shklar, either alone or in combination, fail to teach or suggest such an assembly of subdocuments as set forth in independent claims 1, 13, 14, 17, 21, 26, 37-39 and 50. Additionally, Doerre is not analogous art with respect to the claimed invention.

**A. Claims 1, 2, 5-14, 16-18, 20-25 and 30-53 are not
obvious over any proper combination of Ozzie and Doerre**

1. Doerre is not analogous art.

The claimed invention is related to segmenting, transforming and/or viewing electronic documents on devices with limited capabilities. In particular, due to the limited size of a display that is typically associated with such devices, serving of documents for display is often a nontrivial operation. Accordingly, embodiments of the claimed invention segment the electronic

documents into subdocuments which can later be assembled for display in a particular manner. In this regard, for example, independent claim 13 recites, *inter alia*, assembling subdocuments from segments conforming to an algorithm that tends to **balance the respective sizes of the subdocuments**. In other words, as recited, for example, in independent claim 14, the subdocuments are of approximately the same size.

Ozzie is directed to a method for efficient management of XML documents. While Ozzie discloses that main documents may be linked to subdocuments, which may in turn be linked to each other, Ozzie fails to teach or suggest that subdocuments are assembled to be of approximately the same size or of balanced sizes as set forth by the claimed invention. The Office Action admits this deficiency and accordingly cites Doerre as curing the admitted deficiency of Ozzie. However, Doerre is not related to document segmentation at all and, in any case, also fails to cure the deficiency of Ozzie in regard to the feature above.

Doerre is related to "the area of information mining within a multitude of documents stored on a computer system" (Abstract). Thus, as an initial matter, Doerre is not a proper reference for use in combination with Ozzie since Doerre is not analogous art. To rely on a reference under 35 U.S.C. §103, it must be analogous prior art. See MPEP 2141.01(a). The two-part test for analogous art requires that "the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also *State Contracting & Eng'g Corp. v. Condotta America, Inc.*, 346 F.3d 1057, 1069, 68 USPQ2d 1481, 1490 (Fed.Cir. 2003) (where if the general scope of a reference is outside the pertinent field of endeavor, the reference may still be considered analogous art if subject matter disclosed therein is relevant to the particular problem with which the inventor is involved).

As stated above, the claimed invention is generally directed to segmenting, transforming and/or viewing electronic documents on devices with limited capabilities. Doerre is directed to information mining and, more particularly, to taxonomy (or classification) of documents. As indicated at col. 4, lines 46-52, the taxonomy of the Doerre patent relies upon clustering of similar documents. The problems to be addressed in this art are specifically stated in Doerre. Specifically, Doerre addresses what it identifies as the most important problems in the current

state of the art for taxonomy generation including: 1) providing a scalable taxonomy generation tool capable of generating a taxonomy in a reasonable amount of time even for large numbers of documents (col. 4, lines 6-13); and 2) establishing domain independence to speed up taxonomy generation (col. 4, lines 14-18). In other words, Doerre is in the field of taxonomy generation for documents for information mining and the problem addressed is speeding up and improving the generation of the taxonomy of documents.

Taxonomy generation for documents involved in information mining and segmenting, transforming and/or viewing electronic documents on devices with limited capabilities are clearly different fields of invention. Additionally, one issue to be addressed by an embodiment of the claimed invention is serving documents formatted for display on large displays, to devices with much smaller displays, which is clearly different than the stated problems that Doerre is aimed at addressing (as provided above in reference to Doerre's disclosure at col. 4, lines 6-18). Accordingly, Doerre, on the one hand, and the claimed invention, on the other hand, are simply not in the same field of endeavor and Doerre is also not reasonably pertinent to the particular problem with which the inventor was concerned. There would be no reason for one skilled in the art faced with the problem of providing documents formatted for display on large displays, to devices with much smaller displays, to consider a taxonomy generation tool to be pertinent. Thus, Doerre is not analogous art and, therefore, cannot be relied upon to support an obviousness rejection under 35 U.S.C. §103.

Notably, Appellants submit that in light of the *KSR v. Teleflex* ruling (*KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, USPQ 2d 1385 (2007) (the slip opinion of which is cited hereinafter and which is hereinafter referred to as "KSR"), known work in one field of endeavor may prompt variations of it for use in either the same or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art (see page 13 of KSR slip opinion). Accordingly, even a reference that is non analogous art could be used in connection with sustaining an obviousness rejection in some cases. In other words, making known mutations that do not give unexpected results may not be patentable. However, Appellants respectfully submit that in order to sustain such a rejection involving otherwise non analogous art, the Examiner must articulate the design incentives or market forces that would have prompted adaptation of a known device and that one of skill in the

art could have implemented the claimed variation of the prior art with predictable results (see pages 13 and 14 of KSR slip opinion). However, the Examiner has never articulated design incentives or market forces that are asserted to cause one of skill in the art to undertake such an implementation or articulated how the results of such an implementation would be predictable. Given the lack of an explicit articulation to support the use of the non-analogous art of Doerre as required by KSR, Appellants respectfully submit that Doerre cannot be properly combined with Ozzie. Since Doerre cannot properly be combined with Ozzie, it is respectfully submitted that the rejections of all claims based on the combination of these references should be reversed.

2. Ozzie and Doerre, alone or in combination, fail to render Claims 1, 2, 5-14, 16-18, 20-25 and 30-53 unpatentable.

Despite the discussion above, even if one assumes for the sake of argument that Doerre is analogous art (or that the Examiner articulated design incentives and market forces that would prompt one of skill in the art to combine the cited references with predictable results), the combination of the cited references still fails to teach or suggest the claimed invention as provided in independent Claims 1, 13, 14, 17, 21, 37-39 and 50. As such, the results of the combination of Doerre with Ozzie still fails to result in the claimed invention, whether or not such results are considered predictable.

In this regard, Ozzie fails to teach or suggest the assembly of subdocuments to balance the respective sizes of the subdocuments or that the subdocuments are of approximately the same size as provided by independent Claims 1, 13, 14, 17, 21, 37-39 and 50, as admitted in the Office Action. However, the Office Action states that Doerre cures the deficiency of Ozzie by virtue of the statement at col. 20, lines 39-40 of Doerre indicating that the size of the leaf nodes is well balanced. As indicated at col. 4, lines 46-52, the taxonomy of Doerre relies upon clustering of similar documents. In this regard, Doerre discloses that a leaf-node is a cluster of documents with the largest similarity (see col. 4, lines 50-52). Accordingly, the disclosure of well balanced leaf nodes at col. 20, lines 39-40, merely indicates that the sizes of the clusters of documents are similar and not that the sizes of any subdocuments are similar. In fact, Doerre is completely unrelated to a hierarchy of sub-documents, as indicated above. Rather, each leaf-node comprises a cluster with roughly a same number of documents and such clusters are comprised of whole

documents and not subdocuments as recited in the claimed invention. Although Doerre discloses at col. 17, lines 9-23, that the subset selection process (i.e., selection of a subset of documents for clustering) may be improved if the selection process is performed based on documents of similar size and similar date, such disclosure is only related to documents of the same size and not subdocuments as provided in the claimed invention.

Of note, the final Office Action states that “Doerre teaches information mining clustering to segment a document collection into subsets.” The final Office Action then goes on to assert that the “effect of clustering is to segment a document collection into subsets” citing col. 3, lines 6-8, col. 4, lines 39-40 and col. 12, lines 37-39 (see final Office Action page 14). However, the Examiner’s assertions, quoted above as set forth in the final Office Action, actually support the Appellants’ position rather than refuting it. In this regard, the Examiner states that a document collection (i.e., not a single document, but a plurality of documents) is segmented into subsets. Thus, even using the Examiner’s statements, the result of the segmentation of Doerre is a plurality of whole documents placed into a subset. The subset of Doerre is not a subset of subdocuments, but a subset of documents. Moreover, as stated above, Doerre never segments any documents to form subdocuments at all. Of note, the Examiner never even asserts as much.

However, despite the fact that Doerre is unrelated to segmenting documents into subdocuments, the Examiner still comes to the conclusion that “Doerre, indeed, teaches hierarchy of subdocuments” (see final Office Action page 14). However, the Examiner’s conclusion is *non sequitur*, since the clustering of a subset of documents from a collection of documents is in no way suggestive of creating a hierarchy of subdocuments. Subdocuments and subsets of documents are clearly not the same thing. In this regard, even if one assumes that Doerre discloses some form of a hierarchy of documents, the creation of a hierarchy of documents does not suggest, and is not remotely related to, a hierarchy of subdocuments. More importantly, clustering documents, regardless of cluster size, is not suggestive of assembling subdocuments to balance the respective sizes of the subdocuments as provided in the claimed invention. Thus, Doerre fails to teach or suggest the assembly of subdocuments to balance the respective sizes of the subdocuments or that the subdocuments are of approximately the same size as provided by independent Claims 1, 13, 14, 17, 21, 37-39 and 50.

Furthermore, Appellants respectfully submit that the combination of Ozzie and Doerre does not result in the claimed invention in any case. In this regard, the combination of Ozzie and Doerre would result in a plurality of equally sized groups of documents (as provided by Doerre) in which each document includes subdocuments that may be linked to one another (as provided by Ozzie). Thus, serving as further evidence that the combination of Ozzie and Doerre fails to teach or suggest the assembly of subdocuments to balance the respective sizes of the subdocuments or that the subdocuments are of approximately the same size as provided by independent Claims 1, 13, 14, 17, 21, 37-39 and 50.

Since Ozzie and Doerre each fail to teach or suggest the assembly of subdocuments to balance the respective sizes of the subdocuments or that the subdocuments are of approximately the same size as provided by independent Claims 1, 13, 14, 17, 21, 37-39 and 50, any combination of Ozzie and Doerre also fails to teach or suggest the above recited features. Thus, the rejections of independent Claims 1, 13, 14, 17, 21, 37-39 and 50 should be reversed.

Additionally, Claims 2, 5-12, 16, 18, 20, 22-25, 30-36, 40-49 and 51-53 depend either directly or indirectly from corresponding ones of independent Claims 1, 13, 14, 17, 21, 37-39 and 50 and thus include all the recitations of their corresponding independent claims. Therefore, dependent Claims 2, 5-12, 16, 18, 20, 22-25, 30-36, 40-49 and 51-53 are patentable for at least the same reasons given above for independent claims 1, 13, 14, 17, 21, 37-39 and 50. Accordingly, the rejections of dependent Claims 2, 5-12, 16, 18, 20, 22-25, 30-36, 40-49 and 51-53 should also be reversed.

**B. Claims 26-29 are not obvious over any
proper combination of Ozzie, Doerre and Shklar**

As described above, Doerre cannot be properly combined with Ozzie. As such, the addition of Shklar to the combination does not cure the impropriety of the combination of Doerre with Ozzie. Indeed, Doerre remains non-analogous art relative to Ozzie with no articulation of the design incentives or market forces that would cause one of skill in the art to implement the claimed variation of the prior art and no articulation of how the results of such an implementation would be predictable. Given the lack of an explicit articulation to support the use of the non-analogous art of Doerre as required by KSR, Applicants respectfully submit that

Doerre also cannot properly be combined with Ozzie and Shklar. Since Doerre cannot properly be combined with Ozzie and Shklar, it is respectfully submitted that the rejections of Claims 26-29 based on the combination of these references should be reversed.

As also noted above, even if combined, the combination of Ozzie and Doerre fail to teach or suggest that the subdocuments are of approximately the same size, as recited by independent Claim 26. Notably, Shklar also fails to cure the above-noted deficiency, that is, Shklar also fails to teach or suggest that the subdocuments are of approximately the same size. Indeed, Shklar is not cited for such a proposition.

Since Ozzie, Doerre and Shklar each fail to teach or suggest that the subdocuments are of approximately the same size as provided by independent Claim 26, any combination of Ozzie, Doerre and Shklar also fails to teach or suggest the above recited feature. Thus, the rejection of independent Claim 26 should be reversed. Additionally, Claims 27-29 depend either directly or indirectly from independent Claim 26 and thus include all the recitations of independent Claim 26. Therefore, dependent Claims 27-19 are patentable for at least the same reasons given above for independent Claim 26. Accordingly, the rejection of dependent Claims 27-19 should also be reversed.

8. ***Claims Appendix.***

The claims currently on appeal are as follows:

1. (Previously Presented) A method comprising receiving a machine readable file containing a document that is to be served to a client for display on a client device, the organization of the document in the file being expressed as a hierarchy of information, and

deriving subdocuments from the hierarchy of information by traversing the hierarchy and assembling the subdocuments from segments, at least some of the subdocuments each being assembled from more than one of the segments, at least one of the subdocuments being expressed in a format that permits it to be served separately to the client, at least one of the subdocuments containing information that enables it to be linked to another one of the subdocuments,

wherein the assembling of the subdocuments conforms to an algorithm that tends to balance the respective sizes of the subdocuments.

2. (Previously Presented) The method of claim 1 in which the hierarchical expression comprises extensible mark-up language (XML).

3. (Canceled)

4. (Canceled)

5. (Previously Presented) The method of claim 1 in which the assembling conforms to an algorithm that tends to favor assembling each of the subdocuments from segments that have common parents in the hierarchy.

6. (Previously Presented) The method of claim 1 in which the assembling conforms to an algorithm that tends to favor assembling each of the subdocuments from segments for which replications of nodes in the hierarchy is not required.

7. (Original) The method of claim 1 in which the file is received from an origin server associated with the file.

8. (Original) The method of claim 7 in which the file is expressed in a language that does not organize segments of the document in a hierarchy, and the deriving of subdocuments includes first converting the file to a language that organized segments of the document in a hierarchy.

9. (Original) The method of claim 1 also including serving the subdocuments to the client individually as requested by the client.

10. (Original) The method of claim 9 in which the subdocuments are served to the client using a hypertext transmission protocol.

11. (Original) The method of claim 9 in which the subdocuments are requested by the client based on the contained information that enables it to be linked to another of the subdocuments.

12. (Original) The method of claim 1 also including
identifying a portion of the document that is to be displayed separately from the rest of the document,

the portion of the document that is to be displayed separately being excluded from the subdocument in which the portion would otherwise have appeared, the portion of the document that is to be displayed separately being included in at least one corresponding subdocument, and

when the subdocument in which the portion would otherwise have appeared is served to the client device, embedding a graphical device that can be invoked by the user to retrieve the subdocument that includes the portion of the document that is to be displayed separately.

13. (Previously Presented) A method comprising
receiving, from an origin server, a machine readable file containing a document that is to
be served to a client for display on a client device, the file being expressed in a language that
does not organize segments of the document in a hierarchy,
converting the file to a language that organizes segments of the document in a hierarchy,
traversing the hierarchy and assembling subdocuments from the segments, at least some
of the subdocuments being assembled from more than one of the segments, the assembling
conforming to an algorithm that tends to (a) balance the respective sizes of the subdocuments, (b)
favor assembling the subdocuments from segments that have common parents in the hierarchy,
and (c) assemble the subdocuments from segments for which replications of nodes in the
hierarchy is not required,
at least one of the subdocuments being expressed in a format that permits it to be served
separately to the client, at least one of the subdocuments containing information that enables it to
be linked to another one of the subdocuments, and
serving the subdocuments to the client individually as requested by the client based on
the contained information that enables it to be linked to another of the subdocuments.

14. (Previously Presented) A machine-readable document held on a storage medium
for serving to a client, the document being organized as a set of subdocuments, at least one of the
subdocuments containing information that enables the subdocument to be linked to another of
the subdocuments, the information enabling the subdocument to be linked comprising a URL,
the subdocuments comprising an assembly of segments of the document that are part of a
hierarchical expression of the document, the subdocuments being of approximately the same
size.

15. (Canceled)

16. (Original) The method of claim 14 in which the hierarchical expression
comprises extensible markup language (XML).

17. (Previously Presented) A method comprising
receiving from a client a request for a document to be displayed on a client device,
serving separately to the client a subdocument that represents less than all of the
requested document, the subdocument containing information that links it to at least one other
subdocument,
receiving from the client an invocation of the link to the other subdocument, and
serving separately to the client device the other subdocument, the subdocuments being of
essentially the same length.

18. (Original) The method of claim 17 in which the subdocuments are served to the
client using a hypertext transmission protocol.

19. (Canceled)

20. (Original) The method of claim 17 in which the subdocuments are of a length
that can be displayed on the client device without further truncation.

21. (Original) A method comprising
receiving from a server at a client device, a subdocument of a larger document for display
on the client device,
displaying the subdocument on the client device,
receiving at the client device a request of a user to have displayed another subdocument
of the larger document,
receiving separately from the server at the client device, the other subdocument, and
displaying the other subdocument on the client device,
the subdocuments being of substantially the same length.

22. (Original) The method of claim 21 in which the subdocuments are expressed in a
hypertext transmission protocol.

23. (Original) The method of claim 21 in which the request of the user is expressed as a URL.

24. (Original) The method of claim 21 in which all of each of the subdocuments is displayed at one time on the client device.

25. (Original) The method of claim 21 in which less than all of each of the subdocuments is displayed on the client device at one time.

26. (Previously Presented) A method comprising
displaying a subdocument of a document on a client device,
displaying an icon with the subdocument, and
in response to invocation of the icon, fetching another subdocument of the document from a server and displaying the other subdocument on the client device,
the subdocuments being less than the entire document, the subdocuments being of approximately the same size.

27. (Original) The method of claim 26 in which only a portion of each of the subdocuments is displayed at one time.

28. (Original) The method of claim 27 also including displaying an indication of the position of the currently displayed subdocument in a series of subdocuments that make up the document.

29. (Previously Presented) The method of claim 28 in which the indication includes the total number of subdocuments in the series and the position of the currently displayed document in the sequence.

30. (Original) The method of 1, 17, or 21 in which the subdocuments are derived from the document at the time of a request from the client device for the document.

31. (Original) The method of claim 30 in which the subdocuments are derived in a manner that is based on characteristics of the client device.

32. (Original) The method of claim 31 in which the characteristics of the client device are provided by the client in connection with the request.

33. (Original) The method of claim 32 in which the characteristics include the display capabilities of the client device.

34. (Original) The method of claim 1, 17, or 21 in which the subdocuments are derived from the document before the client requests the document from the server.

35. (Original) The method of claim 34 in which subdocuments are derived for different documents from different origin servers.

36. (Original) The method of claim 1, 17, or 21 in which the subdocuments are derived from the document at a wireless communication gateway.

37. (Previously Presented) Apparatus comprising
a network server configured to receive a machine readable file containing a document that is to be served to a client for display on a client device, and to derive subdocuments from the file, at least one of the subdocuments being expressed in a format that permits it to be served separately to the client, at least one of the subdocuments containing information that enables it to be linked to another one of the subdocuments, the subdocuments being of essentially the same length.

38. (Previously Presented) Apparatus comprising
means for receiving a machine readable file containing a document that is to be served to
a client for display on a client device, and

means for deriving subdocuments from the file, at least one of the subdocuments being
expressed in a format that permits it to be served separately to the client, at least one of the
subdocuments containing information that enables it to be linked to another one of the
subdocuments, the subdocuments being of essentially the same length.

39. (Previously Presented) A machine-readable program stored on a machine-
readable medium and capable of configuring a machine to

receive a machine readable file containing a document that is to be served to a client for
display on a client device, and

derive subdocuments from the file, at least one of the subdocuments being expressed in a
format that permits it to be served separately to the client, at least one of the subdocuments
containing information that enables it to be linked to another one of the subdocuments, the
subdocuments being of essentially the same length.

40. (Previously Presented) The method of claim 7 in which the file comprises an
electronic document.

41. (Previously Presented) The method of claim 7 in which the file comprises an
email file.

42. (Previously Presented) The method of claim 7 in which the file is received from
the origin server in the form of a webpage.

43. (Previously Presented) The apparatus of claim 37 in which the network server is
configured to derive the subdocuments by traversing the hierarchy and assembling the

subdocuments from segments, at least some of the subdocuments each being assembled from more than one of the segments.

44. (Previously Presented) The apparatus of claim 37 in which the file is received from an origin server associated with the file.

45. (Previously Presented) The apparatus of claim 44 in which the file is expressed in a language that does not organize segments of the document in a hierarchy, and the network server deriving the subdocuments includes first converting the file to a language that organized segments of the document in a hierarchy.

46. (Previously Presented) The apparatus of claim 37 in which the network server is also configured to serve the subdocuments to the client individually as requested by the client.

47. (Previously Presented) The apparatus of claim 37 in which the subdocuments are of essentially the same length.

48. (Previously Presented) The machine-readable program of claim 39 in which the machine-readable program is capable of configuring the machine to derive the subdocuments by traversing the hierarchy and assembling the subdocuments from segments, at least some of the subdocuments each being assembled from more than one of the segments.

49. (Previously Presented) The machine-readable program of claim 39 in which the machine-readable program is capable of configuring the machine to also serve the subdocuments to the client individually as requested by the client.

50. (Previously Presented) An apparatus comprising:
a client device configured to receive and display a subdocument of a larger document for display, wherein the client device is also configured to receive a request of a user to have

displayed another subdocument of the larger document, and thereafter separately receive and display at least one other subdocument, the subdocuments being of substantially the same length.

51. (Previously Presented) The apparatus of claim 50 in which the client device is configured to receive and display subdocuments that have been derived from a document in a manner that is based on characteristics of the client device, the client device having provided the characteristics in connection with a request.

52. (Previously Presented) The apparatus of claim 50 in which the client device is configured to receive and display subdocuments that have been derived from a document in a manner that is based on characteristics of the client device, the characteristics including at least one display capability of the client device.

53. (Previously Presented) The apparatus of claim 50 in which the client device comprises a mobile phone or personal digital assistant.

9. ***Evidence Appendix.***

None.

10. ***Related Proceedings Appendix.***

None.

CONCLUSION

For at least the foregoing reasons, Appellants respectfully request that the rejections be reversed.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



Nathaniel T. Quirk
Registration No. 60,676

Customer No. 32127
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111

ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON DECEMBER 28, 2007.